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**UNITED STATE DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION**

JOSEPH TAYLOR, EDWARD MLAKAR,
MICK CLEARY, EUGENE ALVIS, and
JENNIFER NELSON, individually and on
behalf of all others similarly situated,

Plaintiffs,

v.

GOOGLE LLC,

Defendant

Case No. 5:20-CV-07956-VKD

**DECLARATION OF CHRIS THOMPSON
IN SUPPORT OF PLAINTIFFS'
OPPOSITION TO GOOGLE LLC'S
MOTION TO EXCLUDE TECHNICAL
ANALYSES**

Judge: Hon. Virginia K. DeMarchi

1 I, Chris Thompson, declare as follows:

2 1. I am a Partner at 233 Analytics, LLC. I provide litigation consulting services
3 regarding computer engineering and software development. My professional focus is analyzing
4 and explaining the operation of computer source code. I also regularly provide software
5 development and project management services to clients in a number of industries, including
6 development of mobile applications, backend services, data processing, web-based platforms, and
7 ERP-type systems. I make this declaration in support of Plaintiffs' Opposition to Google LLC's
8 Motion to Exclude Technical Analyses. I have personal knowledge of the facts stated in this
9 declaration and, if called as a witness, I could and would competently testify thereto.

10 2. I have served as a consulting expert in 114 litigation matters and testified in eight
11 of them. To my knowledge, no court has ever granted a motion to exclude my expert testimony.

12 3. I have extensive experience analyzing source code, network usage and network
13 resources, and the other matters contained in my expert reports. For example, for the past 15 years,
14 some of the largest and most technologically advanced companies have relied my analysis to
15 inform key business decisions, including Apple, C3.ai, Uber, Intel, IBM, T-Mobile, Hewlett
16 Packard, The Walt Disney Company, and many others. I have spent many thousands of hours for
17 these and other clients analyzing network protocols, cellular communication technology (including
18 3GPP standards and implementation), and source code at all layers of the network and application
19 stack. Measuring network usage is a core part of the analysis I regularly perform for these clients,
20 and many others. My analysis of network usage helps my clients to evaluate the effects of their
21 business decisions, because network resource consumption and network usage are often the only
22 way to qualitatively measure the impact of software changes. I also have experience calculating
23 network overhead, and have built numerous network-connected applications. In addition, I have
24 published research on measuring network consumption, among other resources, in Android
25 devices specifically.

26 4. Attached hereto as **Exhibit 1** is my Curriculum Vitae listing my relevant experience
27 in more detail.

1 5. I provided updated network usage calculations to Plaintiffs' counsel on December
2 22, 2024, which I understand were served to Google and provided to Dr. Stec.

3 6. After I provided my updated analysis, Dr. Stec requested, through Plaintiffs'
4 counsel, for me to provide the results of my analysis in different files and formats. I reformatted
5 the data and provided these files to save Dr. Stec's staff time and to better enable his analysis and
6 damages calculation. I also corrected a typo that resulted in a missing column in one of the files I
7 originally provided. The new data format did not change any of the substance of my analysis or,
8 other than the correction of the typo resulting in a missing column, the data. It derived from the
9 same scripts. Neither my methodology nor my end results changed.

10 7. I have reviewed the data that Dr. Stec produced as part of his updated analysis. It
11 is the data I provided and explained above.

12 8. I have reviewed Google's source code, including for CheckIn, and compared the
13 CheckIn source code to the Android.Info dataset that Google produced in this litigation. The many
14 values in the Android.Info dataset align with the values set by the CheckIn source code. The
15 seenDates field in Android.Info is also consistent with Google's practice of using CheckIn and the
16 databases it populates to track which devices are active on which dates. It is my opinion that the
17 "attributes.seenDate" field reflects the date that a device sends a CheckIn Transfer to Google's
18 server over a network. This is consistent with how Google treats all logs and records that I have
19 reviewed in this litigation: Google generates a log or record at the time that an event occurs, and
20 it marks the log or record with the date and time of the event that generated it.

21 I declare under penalty of perjury, under the laws of the State of California, that the
22 foregoing is true and correct.

23
24
25 Dated: May 7, 2025



Chris Thompson